



## CWSF 2009 - Winnipeg, Manitoba



### Gilly Maycock

#### Deaf By Music: Noise Induced Hearing Loss

**Division:** Health Sciences / None

**Category:** Intermediate

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** St Margaret's

**Abstract:** This project explores the relationship between noise-induced hearing loss and music played on a portable media player. Two experiments were conducted: first, to determine which of seven sites had the highest noise levels and, second, which of two earbud types blocked out background noise to a greater degree. Results determined that noise-reduction earbuds blocked out noise to a greater degree than stock iPod® earbuds.

#### Biography

My name is Gilly Maycock. I am 14 years old and in Grade 9 at St. Margaret's School. I play volleyball, basketball, and soccer. This year, I co-coached the junior school basketball teams. My hobbies include horseback riding and boating. I also enjoy writing and I had an article published in Pacific Yachting Magazine. As well, I was a recipient of the BCTELA award for poetry. I am considering a career in veterinary medicine. This is my first CWSF and I am very excited to be going!



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## CWSF 2009 - Winnipeg, Manitoba



### Amy McQuarrie

#### Evaluation of Erosion Control Methods

**Division:** Engineering / None

**Category:** Intermediate

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** St Margaret's

**Abstract:** The effectiveness of ten erosion control methods were tested on a sand slope at a 10 degree angle. Erosion control methods ranged from conventional armouring to sod, geotextile, polyethylene, wood-chips, and eco-friendly straw mats. Water was sprinkled onto the slope and the eroded sand collected and weighed for comparison. However, the most effective means of erosion control is not necessary the most environmentally friendly.

#### Biography

Hello my name is Amy McQuarrie and I am in grade 9 at St. Margaret's School. I enjoy learning science and I am a competitive gymnast. I have also been on the honour roll since grade four. I hope to become either a engineer or a physiotherapist when I get older. This is my first CWSF and I am very excited.



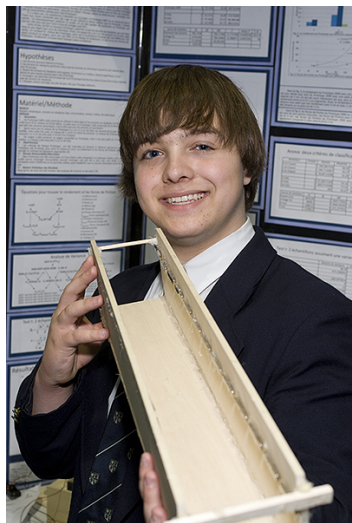
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**Chadi Saad-Roy****Le Néodyme: utile dans le transport?****Division:** Physical & Mathematical Sciences / Automotive**Category:** Intermediate**Region:** Vancouver Island**City:** Victoria, BC**School:** Glenlyon Norfolk School

**Abstract:** Magnetic train Prototypes were built, and neodymium magnets were used and compared to ceramic ones. The speed was taken 7 times at each 3,4,5, 9 and 18 volts. the effect of a space between the magnets was investigated. Also, a wagon was built to see the effect of it. Forces of frictions and the efficiency were calculated. Also, data was statistically analyzed.

**Biography**

My name is Chadi Saad-Roy and I go to Glenlyon Norfolk School in Victoria, BC. I am 14 years old and I am in grade 9. I have been doing many science fair projects over the years. I like reading, playing basketball and judo. Swimming and sailing are other sports I practice. I also enjoy playing and writing music. I play piano, clarinet and a little bit of electric bass. One of my compositions earned me an honourable mention in a national competition and first in British Columbia. I am in a band, and I am also in a choir. This is my second Canada Wide Science Fair, and I am very happy and excited to attend!

**Awards****Value**

The University of Western Ontario Scholarship Gold Medallist - \$2000 Entrance Scholarship Sponsor: University of Western Ontario	\$2 000
Honourable Mention - Automotive - Intermediate Sponsor: AUTO21	\$100
Gold Medal - Physical & Mathematical Sciences - Intermediate Sponsor: EnCana Corporation	\$1 500
<b>Total</b>	<b>\$3 600</b>





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**Oliver Jourmel****Soil Amending Properties of Charcoal****Division:** Physical & Mathematical Sciences / None**Category:** Intermediate**Region:** Vancouver Island**City:** Duncan, BC**School:** Frances Kelsey Secondary

**Abstract:** This experiment tested the ability of charcoal to retain and release nutrients and water, compared to gravel of the same approximate size as the control. Nutrients and water were passed through home-constructed cartridges of charcoal and of gravel. A colorimeter was used to determine the concentration of the nutrients retained and subsequently released, and charcoal was found to have superior retention and slower release.

**Biography**

Oliver Jourmel is a grade 10 student at Frances Kelsey Secondary School on Vancouver Island, BC. He plays violin and piano, and sings in a choir, and enjoys soccer, fencing, juggling, and riding his bike. He is interested in politics, drama, debating and enjoys his self-paced school. He hopes to study law, science and music at university, to pursue a career in teaching and politics. He has done lots of Science Fair projects over the years, winning his division several times and is very happy to be on the BC team at the Canada-Wide Fair for the second time!

**Awards****Value**

The University of Western Ontario Scholarship	\$1 500
Silver Medallist - \$1500 Entrance Scholarship	
Sponsor: University of Western Ontario	
Silver Medal - Physical & Mathematical Sciences - Intermediate	\$700
Sponsor: EnCana Corporation	
Total	\$2 200



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## CWSF 2009 - Winnipeg, Manitoba



### Hannah Bild-Enkin

#### Strategic Stretching: The Effects of Stretching on Strength and Range of Motion

**Division:** Health Sciences / None

**Category:** Senior

**Region:** Vancouver Island

**City:** Victoria, BC

**School:** Esquimalt Community School

**Abstract:** A goniometer and dynamometer were developed to measure quadriceps range of motion (ROM) and strength before and after a 20 stretch. Measurements on 36 participants showed no significantly change in strength, while most showed an increased ROM. The increased ROM may decrease risk of injury in physical activity, while not decreasing performance.

#### Biography

Hannah is, in every aspect of her life, a performer. Be it figure skating, singing or science fair, she goes out and gives her all to the task at hand. She enjoys being a vocalist in the Esquimalt High School jazz program and is working on her grade 5 voice exam. Science fair has allowed her to explore and experience different aspects of science that may prove interesting career options. At this point in time Hannah is hoping to study kinesiology or physiotherapy in university. This is Hannah's second CWSF experience and hopes it will be as exciting as the last.



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**Robin White****Warm and Fuzzy; no More Scuzzy: Effective Small Scale Motor Oil Spill Cleanup****Division:** Engineering / Environmental Innovation**Category:** Junior**Region:** Vancouver Island**City:** Victoria, BC**School:** Gordon Head Elementary

**Abstract:** In part one of this project five readily available materials were used to study motor oil absorbency. Cotton and paper towel performed best. In part two of this project a homemade miniature skimmer containing either a cotton, newspaper or towel absorbency pad was used to test small outboard motor simulated oil spills in salt water and fresh water. Cotton proved to be highly successful.

**Biography**

My name is Robin White, from Victoria, with the Vancouver Island group of Team British Columbia. I am in grade 8 at Gordon Head Middle School, and the VIRSF this year was my first regional science fair, so I am excited to be going to the CWSF!! I am passionate about the environment, which is why I chose to do this project. I also love sports; I was a competitive gymnast for 3 years, competing provincially to level 4 and winning 4th place all around at B.C. championships in 2008. I dance competitively with Karen Clark Dance Studio. I enjoy soccer, volleyball, track, and cross country. In addition, I like to read and draw, and am in the choir and solo group at my school, as well as the leadership program. Obviously I also love science, which is why I'm here!! Next year I will be attending Lambrick Park secondary, where I plan to continue my passion for science.

**Awards****Value**

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Environmental Innovation - Junior Sponsor: EnviroExpo, Presented by VIA Rail Canada	\$300
Total	\$1 300



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